Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Methyl Ethyl Ketoxime	96-29-7	HECTOXCARC Oncogenicity study	40 CFR 798.3300	rats	whole-body inhalation, 6 hr/day, 5 d/wk, 26 months	0, 15, 75, 375 ppm	80/sex/group	There were no differences in survival among any of the exposure groups including the control. An increased incidence of hepatocellular carcinoma and adenoma and spongiosis hepatis was reported. Under the exposure conditions of this study, the test substance was a liver oncogen in the male rat at 75 ppm.	59 FR 23061; 5/4/94 OTS0527778-4, Docket OPTS-44608
Methyl Ethyl Ketoxime	96-29-7	HECTOXCARC Oncogenicity study	40 CFR 798.3300	mice	whole-body inhalation, 6 hr/day, 5d/wk, 18 months	15, 75, 375 ppm	60/sex/group	MEKO produced changes in the olfactory epithelium in all exposed groups in both sexes and was a liver oncogen in males at 375 ppm.	58 FR 65353; 12/14/93, Docket OPTS- 44603
Methyl Ethyl Ketoxime	96-29-7	HEGTOXCHRM Mammalian bone marrow chromosomal aberration assay	40 CFR 798.5385 (modified)	rats	oral (gavage), single dose	300, 600, 1200 mg/kg	5/sex	No increase in chromosomal aberrations was seen.	56 FR 2924; 1/25/91 OTS0529840
Methyl Ethyl Ketoxime	96-29-7	HEGTOXMUTA Sex linked recessive lethal assay	40 CFR 798.5275	*Drosophila*	oral (feeding), 3 days	7500 ppm in 5% sucrose solution	15 males	No increase in mutations was observed.	56 FR 22715; 5/16/91 OTS0529843
Methyl Ethyl Ketoxime	96-29-7	HENEUR Neuropathology	40 CFR 798.6400 (modified)	rats	oral (gavage), 5 d/wk, 13 weeks	0, 40, 125, 400 mg/kg/d	10 or 14/sex	No changes were noted in nervous system structure, but organ (liver and spleen) weights were altered.	56 FR 22715; 5/16/91 OTS0529843
Methyl Ethyl Ketoxime	96-29-7	HENEUR Motor activity	40 CFR 798.6200 (modified)	rats	oral (gavage), 5 d/wk, 13 weeks	0, 40, 125, 400 mg/kg/d	10 or 14/sex	No statistically significant treatment-related changes were noted in total activity counts, but mean total activity counts in the high-dose group was lower than controls.	56 FR 22715; 5/16/91 OTS0529843
Methyl Ethyl Ketoxime	96-29-7	HENEUR Functional observational battery	40 CFR 798.6050 (modified)	rats	oral (gavage), 5 d/wk, 13 weeks	0, 40, 125, 400 mg/kg/d	10 or 14/sex	No treatment-related changes were noted on survival or body weights. Dose-dependent decreases were seen in hemoglobin values, hematocrit, and red blood cell counts in all treated groups, along with increased methemoglobin values, white blood cells, lymphocytes, and Heinz body counts. Treatment-related transient increased incidence of the following were noted in high-dose rats: easy removal and handling, slightly to moderately impaired gait, aerial righting reflex, and slower approach response.	56 FR 22715; 5/16/91 OTS0529843

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Methyl Ethyl Ketoxime	96-29-7	HENEUR Functional observational battery	40 CFR 798.6050 (modified)	rats	oral (gavage), single dose	100, 300, 900 mg/kg	10/sex	No mortalities or changes in body weight, food consumption, clinical observations, or gross pathology were noted. Transient effects were noted in mid- and high-dose rats in gait, aerial righting reflex, easy removal, and handling. No consistent behavioral effects were observed in low-dose rats.	56 FR 22715; 5/16/91 OTS0529842
Methyl Ethyl Ketoxime	96-29-7	HENEUR Motor activity	40 CFR 798.6200 (modified)	rats	oral (gavage), single dose	100, 300, 900 mg/kg	10/sex	Significant depressions in motor activity were seen in high-dose rats at the 1-hour post-dose assessment. Thereafter, all observations were comparable to controls.	56 FR 22715; 5/16/91 OTS0529842
Methyl Ethyl Ketoxime	96-29-7	HERTOXTERA Developmental toxicity	40 CFR 798.4900	rats	oral (gavage), gestation day 6 through 15	0, 60, 200, 600 mg/kg/d	25 females	Maternal toxicity (clinical signs and decreased body weight and food consumption) occurred at 200 mg/kg/day and higher. No evidence of developmental toxicity or teratogenicity was noted at any level.	OTS0529841
Methyl Ethyl Ketoxime	96-29-7	HERTOXTERA Developmental toxicity	40 CFR 798.4900	rabbits	oral (gavage), gestation day 6 through 18	0, 8, 14, 24, 40 mg/kg/d	18 females	Three high-dose females aborted and 8 were found dead between gestation days 11 and 24. Dose-related weight loss was noted at 24 and 40 mg/kg/day. An accurate assessment of developmental effects could not be made in the remaining high-dose group. The maternal NOEL was 14 mg/kg/day, and the embryotoxicity, fetotoxicity, and teratogenicity NOEL was 24 mg/kg/day,	OTS0529841
Methyl Ethyl Ketoxime	96-29-7	HERTOXTERE Reproductive/fertility effects	40 CFR 798.4700 (modified)	rats	oral (gavage), 10 wks pre-mating, through 2 generations	0, 10, 100, 200 mg/kg/d	30/sex/dose	Dose-related effects were seen in adults of both generations (reduced weight gain, extramedullary hematopoiesis, and hemosiderosis at 10 mg/kg/d). No evidence of reproductive or postnatal toxicity was noted.	57 FR 17907; 4/28/92 OTS0540332
Methyl Ethyl Ketoxime	96-29-7	HESTOX Inhalation toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42099A)	rats	inhalation; 6 hr/d, 5 d/wk, 4 weeks	0, 25, 100, 500 ppm	10/sex/dose	There were no mortalities or treatment-related physical effects. Exposure produced increases in methemoglobin levels in the 100 ppm group from 0.1 to 0.3% (females only) and in the 400 ppm group from 0.2 to 0.7% (both sexes). Significant alterations in the hematological parameters were also seen in the rats at 400 ppm. In addition, at 400 ppm, increased organ weights were seen in the liver and spleen.	Docket OPTS-42099A Received 6/1/91

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Methyl Ethyl Ketoxime	96-29-7	HESTOX Inhalation toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42099A)	mice	inhalation; 6 hr/d, 5 d/wk, 4 weeks	0, 25, 100, 500 ppm	10/sex/dose	There were no mortalities or treatment-related physical effects. Increases in methemoglobin levels of 1 to 2% were noted in the 400 ppm mice only. In addition, 400 ppm exposures in male mice were associated with increased absolute or relative weights of the spleen and adrenals. Gross postmortem observations and histological examination of the liver revealed no treatment-related changes.	OTS0529835
Methyl Ethyl Ketoxime	96-29-7	HESTOX Inhalation toxicity	Non-TSCA Protocol/ Guideline (docket OPTS-42099A)	rats	inhalation, whole-body; 6 hr/d, 5 d/wk, 13 weeks	0, 3, 10, 30, 100 ppm	80 males/dose	At the end of 1, 2, 4, and 13 week exposure periods, degeneration of olfactory epithelium lining of the dorsal meatus was seen in the anterior region of the nasal cavity. The incidence and severity was dose-related and greatest at 100 ppm followed by 30 ppm. At the end of the 13-week exposure period, this effect was also seen in several mice of the 10 ppm group. The NOEL was determined to be 3 ppm for olfactory degeneration.	Docket OPTS-42099A; 8/24/95
Methyl Ethyl Ketoxime	96-29-7	HESTOX Inhalation probe study	Non-TSCA Protocol/ Guideline (docket OPTS-42099A)	rats	inhalation, 6 hr/d, 5 d/wk, 8 weeks	100 ppm	10/sex	One rat died on test day 44. Treatment-related decreased activity, prostration, and irregular gait were noted. Lacrimation and yellow anogenital staining in females was also noted.	56 FR 22715; 4/16/91 OTS0529842
Methyl Ethyl Ketoxime	96-29-7	HESTOX Inhalation probe study	Non-TSCA Protocol/ Guideline (docket OPTS-42099A)	mice	inhalation, 6 hr/d, 5 d/wk, 8 weeks	100 ppm	10/sex	Two mice died (test day 16 and 17). Treatment-related decreased activity, prostration and irregular gait were noted. Lacrimation and yellow anogenital staining in females was also noted. Mice appeared less sensitive than rats.	56 FR 22715; 4/16/91 OTS0529842